

Figure 31: BMP Implementation and Water Quality Risk for Streamside Management Zone

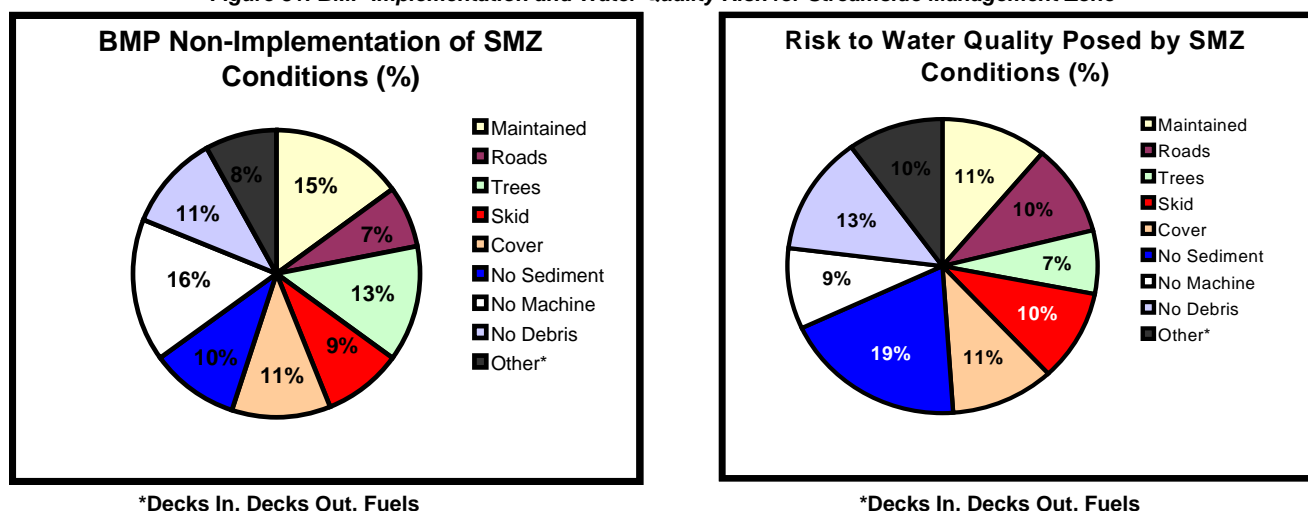


Table 3: Streamside Management Zone Conditions

1. SMZ uniformly maintained along intermittent and perennial streams/waterbodies.	7. Felled trees removed without machinery entering SMZ in areas where ephemeral streams intersect intermittent/perennial waters.
2. Roads or trails minimized in SMZ (exclude stream crossing areas).	8. Trees and logging debris removed from streams.
3. Trees were felled away from stream channel.	9. Logging decks and/or sawmill sites located outside of SMZ.
4. Skidders and other equipment use was minimized in SMZ (except at stream crossings).	10. Logging decks and/or sawmill sites in SMZ ≥ 10 feet from stream/waterbody. (Exception)
5. Forest floor/ground cover is essentially undisturbed.	11. Fuels and chemicals stored outside SMZ.
6. No visible sediment from operations present in streams/waterbodies.	

The BMP implementation was noted to be inversely proportioned to the potential risk to water quality. Some BMP conditions were consistently implemented at a high rate, but posed a high risk to water quality when not implemented. For example, 94 percent of the sites had the condition “Logging **decks** and/or sawmill sites located **outside** of SMZ” correctly implemented. However, when this condition was not implemented, 80 percent of these sites were estimated to pose a risk to water quality.

In summary, the SMZ BMP correlates closely to FPG .0201. The SMZ’s purpose is to slow, filter and trap sediment and other debris. Unfortunately, survey results show SMZs are not regularly being implemented adequately or correctly. Many conditions need to be improved upon to overcome these SMZ inadequacies. For example, there were eight different BMP conditions that when combined contributed to more than 90 percent of the non-implementation and risk to water quality (Figure 31). Slope, soil type, season, vegetation type and ground cover need to be considered when planning the size of a SMZ. Larger or smaller SMZs widths are acceptable provided the SMZ adequately protects the stream from receiving pollutants. The SMZ width recommendations found in the BMP manual are minimum distances to establish vegetative buffers and represent the best defense to succeed in preventing polluted runoff from reaching a waterbody.